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signal crossings of the active reference voltage are ignored. After the dead-time, input
signal crossings of the active reference voltage will change the received signal output.

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REMARKS

1. This paper is responsive to the Office Action mailed December 10, 2002.

10 Reconsideration and further examination is respectfully requested. No claims have
been amended. No claims have been cancelled. Claims 1-15 remain. No new matter
has been added.

2. The disclosure was objected to because of an informality in the abstract. The
15 abstract has been amended by this paper to correct this informality.

3. Claims 1-15 were rejected under 35 §102(b) as being anticipated by Saunders et al.
(5,933,459). Applicant respectfully traverses. Saunders discloses a circuit and
method whereby an *inactivated* reference voltage is activated in response to the input
20 voltage crossing an *activated* reference voltage. This means that Saunders changes
the reference voltage from the activated reference to the inactivated reference when
the input signal crosses the *activated* reference voltage. To illustrate this in Saunders,
note how when the input signal crosses the activated reference (for example, V(ref1))
the output from the comparator 410(a) propagates through MUX 420, latch 310, and
25 this signal then changes which reference voltage is activated. In other words, the
activated signal is changed without regard to the input voltage's relation to the

inactivated reference voltage which is being output on the output of comparator

410(b). Accordingly, Saunders does not disclose activating...in response to an input voltage crossing an *inactivated* reference voltage. Similar limitations are in all of applicant's independent claims and are therefore not disclosed, taught, or suggested by Saunders.

“A claim is anticipated only if each and every element as set forth in the claims is found ... in a single prior art reference” *Verdegall Bros. V. Union Oil co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Accordingly, since Saunders does not disclose activating...in response to an input voltage crossing an *inactivated* reference voltage as called for by applicants claims, applicants claims are not anticipated by Saunders.

Furthermore, applicant's invention is not obvious in view of Saunders. “To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974)” MPEP 2143.03. Since Saunders does not disclose activating...in response to an input voltage crossing an *inactivated* reference voltage as called for by applicants claims, Saunders does not teach or suggest all of applicants claim limitations. Accordingly, applicant respectfully submits that applicant's invention is not obvious in view of Saunders.

4. Hofsaess (US 5,696,777) and Taurand (US 6,462,558) were made of record but not relied upon. Neither of these references, either alone or in combination, teach, disclose and suggest all of applicant's independent claim limitations.

5. This application is considered to be in condition for allowance and such action is earnestly solicited.

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Respectfully submitted

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by 

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Version with Markings to Show Changes Made

IN THE SPECIFICATION:

- 5 The ABSTRACT has been amended as follows:

Two reference voltages and two differential receivers are used to detect low-to-high and high-to-low transitions on an input signal and set a received signal output. ~~On~~
One reference voltage is set near but under the electrical high voltage level and the other
10 is set near but above the electrical low voltage level. The reference voltage that is closest
to the input signal is designated as the active reference voltage. When the input signal
crosses the active reference voltage digital value of the received signal output is changed.
When the input signal then crosses the inactive reference voltage, the inactive reference
voltage is made the active reference voltage. A dead-time is then waited where input
15 signal crossings of the active reference voltage are ignored. After the dead-time, input
signal crossings of the active reference voltage will change the received signal output.